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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/825,792   | 04/16/2004  | John Geoffrey Chan   | 9215                | 9078             |
| 27752 7590 02/22/2008<br>THE PROCTER & GAMBLE COMPANY<br>INTELLECTUAL PROPERTY DIVISION - WEST BLDG.<br>WINTON HILL BUSINESS CENTER - BOX 412<br>6250 CENTER HILL AVENUE<br>CINCINNATI, OH 45224 |             |                      |                     |                  |
| EXAMINER   |             |                      |                     |                  |
| KARLS, SHAY LYNN   |             |                      |                     |                  |
| ART UNIT   |             | PAPER NUMBER         |                     |                  |
| 3723   |             |                      |                     |                  |
| MAIL DATE  |             | DELIVERY MODE        |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/825,792

## Applicant(s)

CHAN ET AL.

## Examiner

Shay L. Karls

## Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 12-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 2/7/08
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 12-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mei (USPN 5617603) in view of Psiharis (USPN 2253210) and in view of Volpenhein (WO 98/18364).

With regards to claim 1, 25, 30 and 33, Mei teaches a toothbrush comprising an elongated handle (not shown) and a head (1). The elongated head comprises a longitudinal axis, a top face and bottom face. The top face comprises a brushing surface (figure 1) wherein the brushing surface comprises a bristle carrier (3, 4) configured to move with respect to the head. The brushing surface comprises generally circular tufts (figure 1, element 31, 41) extending away from the bristle carrier.

With regards to claim 23, 29 and 31, the handle comprises a motor (not shown, column 2, lines 49-53).

With regards to claim 24, 29 and 31, the motor is operatively connected to the brushing surface.

Mei teaches all the essential elements of the claimed invention however fails to teach that the rear surface of the head comprises an elastomeric massaging surface as claimed. Psiharis teaches a toothbrush head with a front surface comprising bristles (14) and a rear surface comprising a massaging surface (figures 4 and 5). The massaging surface comprises a plurality of projections oriented in rows (figures 4 and 5) (claims 12, 30 and 33). The projections are generally conical nubs (30) (claims 13, 26 and 40). The projections are in rows transverse to the longitudinal axis of the brush (figure 5) or parallel to the longitudinal axis of the brush (figure 4) (claims 14, 15, 25 and 30). The projections cover a substantial portion of the bottom face (claim 16). The projections are uniform in shape (figures 4-5) (claim 17). The projections are nubs (30; figure 4) (claim 19). The projections are conical (30) (claim 20). The head further comprises ridge like elements (figure 5) that are arcuate in shape (they have a curved top surface)(claims 21-22 and 28). The massaging plate is secured to the bottom face of the toothbrush head (figure 3 and 7) (claim 34). See figure below. The massaging plate has a top surface that is generally coplanar with the bottom face of the toothbrush head (figure 8, 9 and 10) (claim 35). The massaging plate is elongate (figure 4 and 5) (claim 37). The top face comprises a plurality of resilient elements (claim 39). See figure below. The bottom face is generally planar (figure 4 and 5) (claim 41). The top face is generally planar (figure 3 and 7) (claim 42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the rear surface of Mei with a massaging surface as taught by Psiharis since the massaging surface will aid to stimulate circulation in the gums and promote the general

healthfulness of the oral cavity (page 2, col. 2, lines 5-10). Further, when combining Mei with Psiharis it is obvious that one of skill in the art would have recognized the need to operatively connect the massaging surface to the motor to further stimulate a user's gums. The type of motion that is imparted to the head would vary depending on the type of motor being used. The motor could impart a vibrating, pulsating, sinusoidal or wave motion. One of skill in the art would have recognized the need to the various motor motions and it would have been obvious to use the various motion to achieve different cleaning and massaging effects (claim 32). .

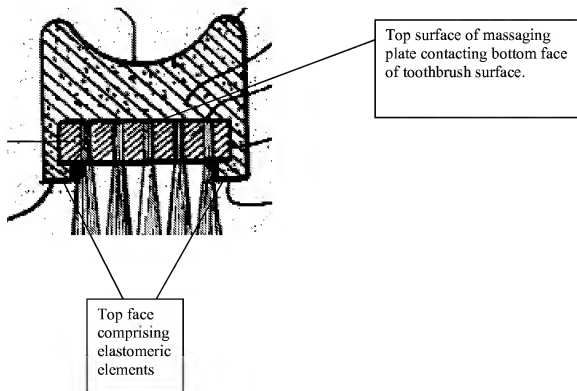
Mei in view of Psiharis teach all the essential elements of the claimed invention however fail to teach that the plurality of projections are oriented in staggered rows (claims 12, 25, 30 and 33). The references teach that the massaging plate and projections are made from a resilient material however fails to teach using an elastomeric material (claims 18, 27, 36, 38 and 39). Additionally, the reference fails to teach that the toothbrush head is made from a polymer (claim 36).

Volpenhein teaches a toothbrush head with staggering rows of projections (figure 2a). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to stagger the rows of projections on Psiharis' massaging surface as taught of Volpenhein because Applicant has not disclosed that staggering rows provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the projections taught by Psiharis or the claimed staggering as taught by Volpenhein because both projections perform the same function of massaging a user's gums equally well. Therefore, it would have

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been obvious to one of ordinary skill in the art to modify Mei in view of Psiharis with Volpenhein to obtain the invention as specified in claims 18, 25, 30 and 33.

Regarding the material used for the massaging plate, the projections and the toothbrush head, Mei in view of Psiharis fails to teach using an elastomeric material for the massaging plate and projections but fail to teach using a polymer such as polypropylene, polystyrene, polyethylene, etc. for the toothbrush head. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use an elastomeric material for the massaging plate and projections as well as use a polymer such a polypropylene, polystyrene, polyethylene, etc., for the toothbrush head since it has been held within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering choice. *In re Leshin*, 125 USPQ 416.



***Response to Arguments***

Applicant's arguments with respect to claims 12, 25, 30 and 33 have been considered but are moot in view of the new ground(s) of rejection. The applicant amended the claims to include the limitation that the brushing surface of the head is configured to move with respect to the head. This limitation was never previously claimed and therefore further consideration and search was necessitated by the applicant's amendment. Thus a new rejection of Mei in view of Psiharis and Volpenhein was made.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Karls whose telephone number is 571-272-1268. The examiner can normally be reached on 7:00-4:30 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shay L Karls/  
Primary Examiner, Art Unit 3723